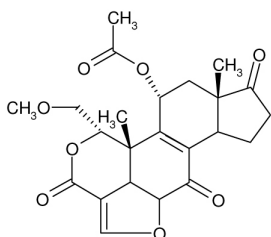


## Wortmannin KY 12420 PI 3-Kinase Inhibitor

Cat. No.	Amount
INH-001	1 mg



For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

### Source

*Talaromyces wortmannii*

### Form

Lyophilized.

### Solubility

25 mg/ml soluble in DMSO, 5 mg/ml in Ethanol.  
Insoluble in water.

### Molecular Formula

C<sub>23</sub>H<sub>24</sub>O<sub>8</sub>

### Molecular Weight

428.4 g/mol

### Purity

≥98%

### Description

Wortmannin is a cell-permeable, fungal metabolite that acts as a potent, selective and irreversible inhibitor of phosphatidylinositol 3-kinase (PI3K). It is active with purified preparations, cytosolic fractions and suitable for use with intact cells.

Wortmannin blocks the catalytic activity of PI3-Kinase with an IC<sub>50</sub> of 5 nM and without affection of upstream signalling events.

It also inhibits the activities of myosin light chain kinase (MLCK), PI4-Kinase and phospholipase C (PLC) but at concentrations about 100 fold higher than those required for PI3K inhibition.

### Selected References:

- Arcaro *et al.* (1993) Wortmannin is a potent phosphatidylinositol 3-kinase inhibitor: the role of phosphatidylinositol 3,4,5-trisphosphate in neutrophil responses. *Biochem. J.* **296**:297.
- Wymann *et al.* (1994) Platelet-derived growth factor-induced phosphatidylinositol 3-kinase activation mediates actin rearrangements in fibroblasts. *Biochem J.* **298**:517.
- Walker *et al.* (2000) Structural Determinants of Phosphoinositide 3-Kinase Inhibition by Wortmannin, LY294002, Quercetin, Myricetin, and Staurosporine. *Mol. Cell.* **6**:909.
- Houle *et al.* (2003) Wortmannin alters the intracellular trafficking of the bradykinin B2 receptor: role of phosphoinositide 3-kinase and Rab5. *Biochem. J.* **375**:151.